



STIC Search Report

EIC 2800

STIC Database Tracking Number

TO: Karl Tamai
Location: CP4- 11A15
Art Unit : 2834
Monday, June 23, 2003

Case Serial Number: 10/040627

From: Darcy Bates
Location: EIC 2800
CP4-9C18
Phone: 306-5419

darcy.bates@uspto.gov

Search Notes

Re: 10/040,627 US RE 37,967

Attached are search results.

**No U. S. litigation was found in searches of
Lexis-Nexis and Questel-Orbit databases.**

**If more searching or explanation is needed, please let
me know.**

**Thanks,
Darcy Bates**

Bates, Darcy

From: Tamai, Karl
Sent: Friday, June 20, 2003 6:27 AM
To: Bates, Darcy
Subject: reissue litigation search?

what info do you or jeff need for a litigation search in a reissue application?

app number: 10/040627

In re Reissue Application:

Filed: June 5, 1997

Patent No. 5,422,524

Granted: June 6, 1995

Patentee: Koyo Seiko Co., Ltd.

For: ANTIFRICTION BEARING AND ALTERNATOR INCORPORATING THE SAME FOR USE IN VEHICLES

there are two other reissue application at the PTO for the same patent, so you probably have already done this search once.

karl.

Day : Monday
Date: 6/23/2003

**PALM INTRANET**

Time: 08:55:39

Application Number Information

Application Number: 10/040627

Assignments

Examiner Number: 73435 / TAMAI, KARL

Filing Date: 01/09/2002

Group Art Unit: 2834 **IMAGE**

Effective Date: 01/09/2002

Class/Subclass: 310/090.000

Application Received: 01/09/2002

Lost Case: NO

Patent Number:

Interference Number:

Issue Date: 00/00/0000

Unmatched Petition: NO

Date of Abandonment: 00/00/0000

L&R Code: Secrecy Code:1

Attorney Docket Number: P64591US2

Third Level Review: NO

Secrecy Order: NO

Status: 30 /DOCKETED NEW CASE - READY FOR EXAMINATION Status Date: 06/09/2003

Confirmation Number: 3842

Oral Hearing: NO

Title of Invention: ANTIFRICTION BEARING AND ALTERNATOR INCORPORATING
SAME FOR USE IN VEHICLES

Bar Code	PALM Location	Location Date	Charge to Loc	Charge to Name	Employee Name	Location
----------	---------------	---------------	---------------	----------------	---------------	----------

**Appln
Info**[Contents](#)[Petition Info](#)[Atty/Agent Info](#)[Continuity Data](#)[Foreign Data](#)[Inve](#)

Search Another: Application# or Patent#
PCT / / or PG PUBS #
Attorney Docket #
Bar Code #

To go back use Back button on your browser toolbar.

[Back to PALM](#) | [ASSIGNMENT](#) | [OASIS](#) | [Home page](#)

Day : Monday
Date: 6/23/2003

Time: 08:55:44

PALM INTRANET

Continuity Information for 10/040627

Parent Data

10040627

is a continuation of 08869844

Which is a reissue of 08152687

is a division of 07203972

Child Data

No Child Data

Appln Info	Contents	Petition Info	Atty/Agent Info	Continuity Data	Foreign Data	Invent
------------	----------	---------------	-----------------	------------------------	--------------	--------

Search Another: Application# or Patent#

PCT / / or PG PUBS #

Attorney Docket #

Bar Code #

To go back use Back button on your browser toolbar.

Back to [PALM](#) | [ASSIGNMENT](#) | [OASIS](#) | [Home page](#)

Day : Monday
Date: 6/23/2003

Time: 08:55:48

PALM INTRANET

Application Number Information

Application Number: 08/869844

Assignments

Filing Date: 06/05/1997

Effective Date: 06/05/1997

Application Received: 06/05/1997

Patent Number: RE37967

Issue Date: 01/21/2003

Date of Abandonment: 00/00/0000

Attorney Docket Number: P64591US0

Status: 150 /PATENTED CASE

Confirmation Number: 6235

Examiner Number: 73435 / TAMAI, KARL

Group Art Unit: 2834

Class/Subclass: 310/090.000

Lost Case: NO

Interference Number:

Unmatched Petition: NO

L&R Code: Secrecy Code:1

Third Level Review: NO

Secrecy Order: NO

Status Date: 01/02/2003

Oral Hearing: NO

Title of Invention: ANTIFRICTION BEARING AND ALTERNATOR INCORPORATING
SAME FOR USE IN VEHICLES

Bar Code	PALM Location	Location Date	Charge to Loc	Charge to Name	Employee Name	Location
08869844	2811	06/18/2003	28X1	TAMAI, KARL	NGO, CHAU	CP4/03/C 32

Appln
Info

Contents	Petition Info	Atty/Agent Info	Continuity Data	Foreign Data	Inve
----------	---------------	-----------------	-----------------	--------------	------

Search Another: Application# Search or Patent# Search

PCT / / Search or PG PUBS # Search

Attorney Docket # Search

Bar Code # Search

To go back use Back button on your browser toolbar.

Back to [PALM](#) | [ASSIGNMENT](#) | [OASIS](#) | [Home page](#)

Day : Monday
Date: 6/23/2003

Time: 08:55:52

PALM INTRANET

Continuity Information for 08/869844

Parent Data

08869844

is a reissue of 08152687

is a division of 07203972

Child Data

10040627 is a continuation of 08869844

Appln Info	Contents	Petition Info	Atty/Agent Info	Continuity Data	Foreign Data	Invent
------------	----------	---------------	-----------------	--------------------	--------------	--------

Search Another: Application# or Patent#
PCT / / or PG PUBS #
Attorney Docket #
Bar Code #

To go back use Back button on your browser toolbar.

Back to [PALM](#) | [ASSIGNMENT](#) | [OASIS](#) | [Home page](#)

Day : Monday
Date: 6/23/2003

PALM INTRANET

Time: 08:55:56

Application Number Information

Application Number: **08/152687**

Assignments

Filing Date: **11/16/1993**

Effective Date: **11/16/1993**

Application Received: **11/16/1993**

Patent Number: **5422524**

Issue Date: **06/06/1995**

Date of Abandonment: **00/00/0000**

Attorney Docket Number: **P133005**

Status: **150 /PATENTED CASE**

Confirmation Number: **2005**

Title of Invention: **ANTIFRICTION BEARING AND ALTERNATOR INCORPORATING SAME FOR USE IN VEHICLES**

Examiner Number: **69091 / HASZKO, DENNIS**

Group Art Unit: **2102**

Class/Subclass: **310/090.000**

Lost Case: **NO**

Interference Number:

Unmatched Petition: **NO**

L&R Code: Secrecy Code:1

Third Level Review: **NO**

Secrecy Order: **NO**

Status Date: **05/26/1995**

Oral Hearing: **NO**

Bar Code	PALM Location	Location Date	Charge to Loc	Charge to Name	Employee Name	Location
08152687	28I1	06/16/2003	28X1	TAMAI, KARL	NGO, CHAU	CP4/03/C 32

Appln Info

Contents

Petition Info

Atty/Agent Info

Continuity Data

Foreign Data

Inve

Search Another: Application# or Patent#

PCT / / or PG PUBS #

Attorney Docket #

Bar Code #

To go back use Back button on your browser toolbar.

Back to [PALM](#) | [ASSIGNMENT](#) | [OASIS](#) | [Home page](#)

Day : Monday
Date: 6/23/2003

Time: 08:56:00

PALM INTRANET

Continuity Information for 08/152687

Parent Data

08152687

is a division of 07203972

Child Data

08869844 is a division of 07203972

10040627 is a continuation of 08869844

Appln Info	Contents	Petition Info	Atty/Agent Info	Continuity Data	Foreign Data	Invent
----------------------------	--------------------------	-------------------------------	---------------------------------	--	------------------------------	------------------------

Search Another: Application# or Patent#
PCT / / or PG PUBS #
Attorney Docket #
Bar Code #

To go back use Back button on your browser toolbar.

Back to [PALM](#) | [ASSIGNMENT](#) | [OASIS](#) | [Home page](#)

Day : Monday
Date: 6/23/2003

PALM INTRANET

Time: 08:56:05

Application Number Information

Application Number: **07/203972**

Assignments

Examiner Number: **59883 / FOOTLAND, LENARD**

Filing Date: **06/08/1988**

Group Art Unit: **2405**

Effective Date: **06/08/1988**

Class/Subclass: **384/492.000**

Application Received: **06/08/1988**

Lost Case: **NO**

Patent Number:

Appeal Number: **931131**

Issue Date: **00/00/0000**

Unmatched Petition: **NO**

Date of Abandonment: **11/23/1993**

L&R Code: Secrecy Code:1

Attorney Docket Number: **P13-1560-A88**

Third Level Review: **NO**

Secrecy Order: **NO**

Status: **164 /ABANDONED -- FAILURE TO PAY ISSUE FEE**

Status Date: **11/23/1993**

Confirmation Number: **5752**

Oral Hearing: **YES**

Title of Invention: **ANTIFRICTION BEARING AND ALTERNATOR INCORPORATING SAME FOR USE IN VEHICLES**

Bar Code	PALM Location	Location Date	Charge to Loc	Charge to Name	Employee Name	Location
07203972	2811	06/17/2003	28X1	TAMAI, KARL	NGO, CHAU	CP4/03/C 32

Appln
Info

[Contents](#)

[Petition Info](#)

[Atty/Agent Info](#)

[Continuity Data](#)

[Foreign Data](#)

[Inve](#)

Search Another: Application#

or Patent#

PCT / /

or PG PUBS #

Attorney Docket #

Bar Code #

To go back use Back button on your browser toolbar.

Back to [PALM](#) | [ASSIGNMENT](#) | [OASIS](#) | [Home page](#)

Day : Monday
Date: 6/23/2003

Time: 08:56:09

PALM INTRANET

Continuity Information for 07/203972

Parent Data

No Parent Data

Child Data

08152687 is a division of 07203972

08869844 is a division of 07203972

10040627 is a continuation of 08869844

Appin Info	Contents	Petition Info	Atty/Agent Info	Continuity Data	Foreign Data	Invent
------------	----------	---------------	-----------------	------------------------	--------------	--------

Search Another: Application# or Patent#

PCT / / or PG PUBS #

Attorney Docket #

Bar Code #

To go back use Back button on your browser toolbar.

Back to [PALM](#) | [ASSIGNMENT](#) | [OASIS](#) | [Home page](#)

Source: [Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Patents](#) > [U.S. Patents](#) > [Reissue Patents](#) ⓘ
Terms: **37967** (Edit Search)

869844 (08) RE 37967 January 21, 2003

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT
RE **37967**

♦ [Get Drawing Sheet 1 of 5](#)

[Access PDF of Official Patent.](#) (Note: Cost incurred in a later step)

The Adobe Acrobat Reader must be installed on your computer to access Official Patent text.
If you do not have this FREE reader, you can download it now from www.adobe.com.

[Link to Claims Section](#)

January 21, 2003

Antifriction bearing and alternator incorporating same for use in vehicles

INVENTOR: Nakamura, Sigenobu - Anjo, Japan (JP); Siga, Tutomu - Aichi-ken, Japan (JP); Mitani, Kenzo - Obu, Japan (JP); Fujita, Yoshiki - Osaka, Japan (JP); Kitamura, Masayuki - Osaka, Japan (JP); Miyazaki, Hiroyuki - Osaka, Japan (JP); Hoshino, Teruo - Osaka, Japan (JP)

APPL-NO: 869844 (08)

FILED-DATE: June 5, 1997

GRANTED-DATE: January 21, 2003

PRIORITY: June 10, 1987 - 62145483, Japan (JP); June 10, 1987 - 62145484, Japan (JP)

ASSIGNEE-AT-ISSUE: Koyo Seiko Co., Ltd., Osaka, Japan (JP), 03
Denso Corporation, Kariya, Japan (JP), 03

LEGAL-REP: Jacobson Holman PLLC

PUB-TYPE: January 21, 2003 - Reissue Patent (E1)

PUB-COUNTRY: United States (US)

REL-DATA:

Reissue of: 08/152687, November 16, 1993, PENDING 05422524, June 6, 1995

US-MAIN-CL: 310#90

US-ADDL-CL: 310#42, 29#898.14

CL: 310, 29

SEARCH-FLD: 310#90, 310#42, 029#898.14

IPC-MAIN-CL: 7F 16C035#0

IPC ADDL CL: H 02K005#16

PRIM-EXMR: Tamai, Karl



LexisNexis™ Total Research System

[Practice Area Pages](#)[Change Client](#)[Options](#)[Feedback](#)[Sign Off](#)[Help](#)**Search**[Search Advisor](#)[Get a Document](#)[Shepard's® - Check a Citation](#)

ECLIPSE™

[History](#)**Sources**[Guided Search Forms](#)[Command Searching](#)[Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Patents](#) > [U.S. Patents](#) > **[Reissue Patents](#)** ⓘ**Enter Search Terms**☒ **Terms and Connectors** ☐ Natural Language

37967

Search

Use connectors to show relation of terms (cat or feline, jane w/3 doe) more...

☒ **Suggest Words and Concepts for Entered Terms**☒ **Restrict Search Using Document Segments**

Optional: Restrict by Date

☒ **No Date Restrictions** ☐ From To **Search** | [Search Advisor](#) | [Get a Document](#) | [Shepard's® - Check a Citation](#)[Eclipse™](#) | [History](#) | [Delivery Manager](#) | [Practice Area Pages](#) | [Change Client](#) | [Options](#) | [Feedback](#) | [Signoff](#) | [Help](#)[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

Source: Legal > Area of Law - By Topic > Patent Law > Patents > U.S. Patents > Utility Patents ⓘ

Terms: **patno=5422524** (Edit Search)

152687 (08) 5422524 June 6, 1995

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT
5422524

♦ GET 1st DRAWING SHEET OF 4

Access PDF of Official Patent. (Note: Cost incurred in a later step)

The Adobe Acrobat Reader must be installed on your computer to access Official Patent text.
If you do not have this FREE reader, you can download it now from www.adobe.com.

[Link to Claims Section](#)

June 6, 1995

Antifriction bearing and alternator incorporating same for use in vehicles

REISSUE: Reissue Application filed Jun. 5, 1997 (O.G. Apr. 21, 1998) Ex. Gp.: 2102; Re. S.N. 08/869,844, (O.G. April 21, 1998)

June 9, 2002 - Reissue Application filed Ex. Gp.: 2834; Re. S.N. 10/040,627 (O.G. August 6, 2002)

January 21, 2003 - This Patent was reissued as Reissue Patent RE 37,967 (O.G. January 21, 2003)

INVENTOR: Nakamura, Sigenobu, Chiryu, JP; Siga, Tutomu, Aichi, JP; Mitani, Kenzo, Obu, JP; Fujita, Yoshiki, Osaka, JP; Kitamura, Masayuki, Osaka, JP; Miyazaki, Hiroyuki, Osaka, JP; Hoshino, Teruo, Osaka, JP

APPL-NO: 152687 (08)

FILED-DATE: November 16, 1993

GRANTED-DATE: June 6, 1995

PRIORITY: June 10, 1987 - 62145483, Japan (JP); June 10, 1987 - 62145484, Japan (JP)

ASSIGNEE-AT-ISSUE: Koyo Seiko Co., Ltd., Osaka, JP
Nippondenso Co., Ltd., Osaka, JP

ASSIGNEE-AFTER-ISSUE: January 26, 1998 - CHANGE OF NAME (SEE DOCUMENT FOR DETAILS)., DENSO CORPORATION 1-1, SHOWA- CHO KARIYA-SHI, AICHI-KEN JAPAN, Reel and Frame Number: 009123/0625

April 8, 2002 - CHANGE OF NAME (SEE DOCUMENT FOR DETAILS)., DENSO CORPORATION 1-1, SHOWA- CHO, KARIYA-SHI AICHI-KEN JAPAN, Reel and Frame Number: 012762/0568

LEGAL-REP: Nikaido, Marmelstein Murray & Oram

PUB-TYPE: June 6, 1995 - Utility Patent having no previously published pre-grant publication (A)

PUB-COUNTRY: United States (US)

REL-DATA:

Addition of Ser. No. 203972, June 8, 1988



LexisNexis™ Total Research System

[Practice Area Pages](#)[Change Client](#)[Options](#)[Feedback](#)[Sign Off](#)[Help](#)**Search**[Search Advisor](#)[Get a Document](#)[Shepard's® - Check a Citation](#)

ECLIPSE™

[History](#)**Sources**[Guided Search Forms](#)[Command Searching](#)[Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Patents](#) > [U.S. Patents](#) > [Utility Patents](#) ⓘ**Enter Search Terms**☒ Terms and Connectors ☐ Natural Language

patno=5422524

Search


Use connectors to show relation of terms (cat or feline, jane w/3 doe) more...


☒ Suggest Words and Concepts for Entered Terms☒ Restrict Search Using Document Segments

Optional: Restrict by Date

☒ No Date Restrictions ☐ From To **Search** | [Search Advisor](#) | [Get a Document](#) | [Shepard's® - Check a Citation](#)[Eclipse™](#) | [History](#) | [Delivery Manager](#) | [Practice Area Pages](#) | [Change Client](#) | [Options](#) | [Feedback](#) | [Signoff](#) | [Help](#)
[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

 **LexisNexis™ Total Research System** [Practice Area Pages](#) [Change Client](#) [Options](#) [Feedback](#) [Sign Off](#) [Help](#)

Search [Search Advisor](#) [Get a Document](#) [Shepard's® - Check a Citation](#) [ECLIPSE™](#) [History](#) 

Sources [Guided Search Forms](#) [Command Searching](#)

[Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Legal News](#) > **Patent, Trademark & Copyright Periodicals, Combined** ⓘ

Enter Search Terms

☒ Terms and Connectors ☐ Natural Language

5422524 or 5,422,524


Search

Use connectors to show relation of terms (cat or feline, jane w/3 doe) more...

 [Suggest Words and Concepts for Entered Terms](#)

 [Restrict Search Using Document Segments](#)

Optional: Restrict by Date

☒ No Date Restrictions  From To

Search | [Search Advisor](#) | [Get a Document](#) | [Shepard's® - Check a Citation](#)
[Eclipse™](#) | [History](#) | [Delivery Manager](#) | [Practice Area Pages](#) | [Change Client](#) | [Options](#) | [Feedback](#) | [Signoff](#) | [Help](#)
[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

No Documents Found!

No documents were found for your search (**5422524** or **5,422,524**).
Please edit your search and try again. You may want to try one or more of the following:

- Check for spelling errors.
- Remove some search terms.
- Use more common search terms.
- If applicable, look for all dates.

Edit Search

[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.



LexisNexis™ Total Research System

[Practice Area Pages](#)[Change Client](#)[Options](#)[Feedback](#)[Sign Off](#)[Help](#)**Search**[Search Advisor ▶](#)[Get a Document ▶](#)[Shepard's® - Check a Citation ▶](#)[ECLIPSE™](#)[History](#)**Sources**[Guided Search Forms](#)[Command Searching](#)

[Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Multi-Source Groups](#) > **Patent Cases from Federal Courts and Administrative Materials** ⓘ

Enter Search Terms☒ **Terms and Connectors** ☐ Natural Language

5422524 or 5,422,524

Search

Use connectors to show relation of terms (cat or feline, jane w/3 doe) more...

☒ **Suggest Words and Concepts for Entered Terms**☒ **Restrict Search Using Document Segments**

Optional: Restrict by Date

☒ **No Date Restrictions** ☐ From To **Search** | [Search Advisor](#) | [Get a Document](#) | [Shepard's® - Check a Citation](#)[Eclipse™](#) | [History](#) | [Delivery Manager](#) | [Practice Area Pages](#) | [Change Client](#) | [Options](#) | [Feedback](#) | [Signoff](#) | [Help](#)
[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

No Documents Found!

No documents were found for your search (**5422524** or **5,422,524**).


Please edit your search and try again. You may want to try one or more of the following:


- Check for spelling errors.
- Remove some search terms.
- Use more common search terms.
- If applicable, look for all dates.

Edit Search


[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

 **LexisNexis™ Total Research System** [Practice Area Pages](#) [Change Client](#) [Options](#) [Feedback](#) [Sign Off](#) [Help](#)

Search [Search Advisor](#) [Get a Document](#) [Shepard's® - Check a Citation](#) [ECLIPSE™](#) [History](#) 

Sources [Guided Search Forms](#) [Command Searching](#)

[News & Business](#) > [News](#) > [News Group File, All](#) 

Enter Search Terms

☒ Terms and Connectors ☐ Natural Language

5422524 or 5,422,524



Search

Use connectors to show relation of terms (cat or feline, jane w/3 doe) more...

 [Suggest Words and Concepts for Entered Terms](#)

 [Restrict Search Using Document Segments](#)

Optional: Restrict by Date

 [No Date Restrictions](#)  From To

[Search](#) | [Search Advisor](#) | [Get a Document](#) | [Shepard's® - Check a Citation](#)
[Eclipse™](#) | [History](#) | [Delivery Manager](#) | [Practice Area Pages](#) | [Change Client](#) | [Options](#) | [Feedback](#) | [Signoff](#) | [Help](#)
[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

No Documents Found!

No documents were found for your search (**5422524** or **5,422,524**).
Please edit your search and try again. You may want to try one or more of the following:

- Check for spelling errors.
- Remove some search terms.
- Use more common search terms.
- If applicable, look for all dates.

A rectangular button with a black background and white text that reads "Edit Search".

[About LexisNexis](#) | [Terms and Conditions](#)

[Copyright ©](#) 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

WELCOME to QUESTEL.ORBITE- Your Guide to INTELLECTUAL PROPERTY

Query/Command : file pluspat

Selected file: PLUSPAT

Search statement 1

Query/Command : usre37967/pn

** SS 1: Results 1

Search statement 2

Query/Command : prt fu legalall max

1 / 1 PLUSPAT - @QUESTEL-ORBIT - image
PN - USRE37967 E1 20030121 [USRE37967]
TI - (E1) Antifriction bearing and alternator incorporating same for use in vehicles
PA - (E1) KOYO SEIKO CO (JP); DENSO CORP (JP)
PAO - Koyo Seiko Company, Ltd., Osaka [JP]
Denso Corporation, Kariya [JP]
IN - (E1) KITAMURA MASAYUKI (JP); MIYAZAKI HIROYUKI (JP); NAKAMURA SIGENOBU (JP); HOSHINO TERUO (JP); SIGA TUTOMU (JP); FUJITA YOSHIKI (JP); MITANI KENZO (JP)
AP - US86984497 19970605 [1997US-0869844]
FD - Reissue of: US5422524 - 19950606
PR - US86984497 19970605 [1997US-0869844]
JP14548387 19870610 [1987JP-0145483]
JP14548487 19870610 [1987JP-0145484]
US15268793 19931116 [1993US-0152687]
US20397288 19880608 [1988US-0203972]
IC - (E1) F16C-035/00 H02K-005/16
EC - F16C-033/62
H02K-005/173C
PCL - ORIGINAL (O) : 310090000; CROSS-REFERENCE (X) : 029898140
310042000
DT - Corresponding document
CT - US4191599; US4240682; US4323401; US4429924; US4476405; US4546280;
US4634908; US4696581; US4808226; AT362807; GB1361553; JP56-34615
Okamoto et al., Effect of SI and Retained Austenite on the Rolling Fatigue Life of Bearing Steel, Seititsu Kenkyu, No. 277, 1973.*

Tsushima et al., "Improvement of Rolling Contact Fatigue Life of Carburized Tapered Rolling Bearings", SAE Technical Paper 860725, Apr. 1986.*

Patent Abstracts of Japan, unexamined applications, section C, vol. 12, No. 82 (c-481), Mar. 15, 1988.

"Zwischenstufenumwandlung von Walzlagerstählen," WTS 74 06 20, SKF Kugellagerfabriken GmbH (Feb. 1974).

E. Yamiya et al., "Effects of Retained Austenite on the Rolling Fatigue Life of Ball Bearing Steels," translation of article published in J. Japan Inst. Metals, vol. 36, p. 711 (1972).

Handbook of Metals, Japan Metal Society, Maruzen Co., Ltd. (Rev. 4th Ed., 1982), sections 7.6.1-7.6.2.

STG - (E1) Reissue Patent

AB - An antifriction bearing includes a fixed ring which comprises a steel containing up to about 10% of residual austenite. An alternator for vehicles includes a stator mounted on a frame, a rotor having its rotary shaft rotatably supported by a pair of bearings on the frame and a drive pulley mounted on one end of the shaft projecting outward from the frame. The outer ring of at least the bearing toward the pulley comprises a steel containing up to about 10% of residual austenite.

UP - 2003-05

1 / 1 LGST - @LEGSTAT

PN - US 37967 [USRE37967]

AP - US 869844/97 19970605 [1997US-0869844]

DT - US-E

ACT - 19970605 US/AE-A
APPLICATION DATA (PATENT)
US 869844/97 19970605 [1997US-0869844]

20030121 US/E1 [+]
REISSUE (PRE-GRANT)

UP - 2003-06

Query/Command : fam re37967/pn

1 Patent Groups
** SS 3: Results 6

Search statement 4

Query/Command : famstate nonstop

1 / 6 PLUSPAT - @QUESTEL-ORBIT

PN - DE3851573 D1 19941027 [DE3851573]

STG - (D1) Granted EP number in bulletin

OTI - (D1) Reibungsloses Lager und mit einem solchen Lager ausgerüsteter Fahrzeugalternator.

PA - (D1) NIPPON DENSO CO (JP); KOYO SEIKO CO (JP)

IN - (D1) NAKAMURA SIGENOBU (JP); SIGA TUTOMU (JP); MITANI KENZO (JP); FUJITA YOSHIKI (JP); KITAMURA MASAYUKI (JP)

IC - (D1) F16C-033/62 H02K-005/173

PN2 - DE3851573 T2 19950323 [DE3851573]

STG2- (T2) Trans. Of EP patent

OTI2- (T2) Reibungsloses Lager und mit einem solchen Lager ausgerüsteter Fahrzeugalternator.

PA2 - (T2) NIPPON DENSO CO (JP); KOYO SEIKO CO (JP)

IN2 - (T2) NAKAMURA SIGENOBU (JP); SIGA TUTOMU (JP); MITANI KENZO (JP); FUJITA YOSHIKI (JP); KITAMURA MASAYUKI (JP)

IC2 - (T2) F16C-033/62 H02K-005/173

AP - DE3851573 19880609 [1988DE-3851573]

PR - JP14548387 19870610 [1987JP-0145483]
JP14548487 19870610 [1987JP-0145484]

1 / 2 LEGALI - ©LEGSTAT
PN - DE 3851573 {DE3851573}
DT - DE-P
ACTE- 19941027 DE/REF-P
 CORRESPONDS TO
 (EP 294813 19941027 {EP-294813})

 19950323 DE/8373
 TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED AND
 HAS BEEN PUBLISHED

 19950921 DE/8363 [-]
 OPPOSITION AGAINST THE PATENT

 20000120 DE/8331 [-]
 COMPLETE REVOCATION
UP - 2000-03

2 / 2 LEGALI - ©LEGSTAT
PN - EP 294813 {EP-294813}
AP - EP 88109225/88 19880609 {1988EP-0109225}
DT - EP-P
ACTE- 19880609 EP/AE-A
 EP-APPLICATION
 EP 88109225/88 19880609 {1988EP-0109225}

 19881214 EP/AK-A2 [+]
 DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH
 REPORT:
 DE FR GB IT

 19881214 EP/A2 [+]
 PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT

 19900110 EP/AK-A3 [+]
 DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:
 DE FR GB IT

 19900110 EP/A3 [+]
 SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)

 19900620 EP/17P [+]
 REQUEST FOR EXAMINATION FILED
 900421

 19911211 EP/17Q [+]
 FIRST EXAMINATION REPORT
 911024

 19940921 EP/AK-B1 [+]
 DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
 DE FR GB IT

 19940921 EP/B1 [+]
 PATENT SPECIFICATION

 19941027 EP/REF-P
 CORRESPONDS TO:
 (DE 3851573 19941027 {DE3851573})

19941110 EP/ET [+]
FR: TRANSLATION FILED

19941206 EP/ITF [-]
IT: TRANSLATION FOR A EP PATENT FILED
STUDIO TORTA SOCIETA' SEMPLICE

19950816 EP/26 [-]
OPPOSITION FILED
950619 AB SKF

19991215 EP/GBPR [-]
GB: PATENT REVOKED UNDER ART. 102 OF THE EP CONVENTION DESIGNATING
THE UK AS CONTRACTING STATE
991024

19991215 EP/27W [-]
REVOKED
19991024

UP - 2000-03

2 / 6 PLUSPAT - @QUESTEL-ORBIT - image
PN - EP0294813 A2 19881214 [EP-294813]
STG - (A2) Pub. Of applic. Without search report
TI - (A2) Antifriction bearing and alternator incorporating same for
use in vehicles.
OTI - (A2) Reibungsloses Lager und mit einem solchen Lager ausgerüsteter
Fahrzeugalternator.
(A2) Palier antifriction et alternateur de véhicule comprenant un
tel palier.
PA - (A2) KOYO SEIKO CO (JP); NIPPON DENSO CO (JP)
IN - (A2) KITAMURA MASAYUKI; NAKAMURA SIGENOBU; SIGA TUTOMU; FUJITA
YOSHIKI; MITANI KENZO
IC - (A2) F16C-033/62 H02K-005/173
PN2 - EP0294813 A3 19900110 [EP-294813]
STG2 - (A3) Publi. Of search report
TI2 - (A3) ANTIFRICTION BEARING AND ALTERNATOR INCORPORATING SAME FOR
USE IN VEHICLES
PN3 - EP0294813 B1 19940921 [EP-294813]
STG3 - (B1) Patent
TI3 - (B1) Antifriction bearing and alternator incorporating same for
use in vehicles.
OTI3 - (B1) Reibungsloses Lager und mit einem solchen Lager ausgerüsteter
Fahrzeugalternator.
(B1) Palier antifriction et alternateur de véhicule comprenant un
tel palier.
PA3 - (B1) KOYO SEIKO CO (JP); NIPPON DENSO CO (JP)
IN3 - (B1) KITAMURA MASAYUKI (JP); NAKAMURA SIGENOBU (JP); SIGA TUTOMU
(JP); FUJITA YOSHIKI (JP); MITANI KENZO (JP)
IC3 - (B1) F16C-033/62 H02K-005/173
LA - ENGLISH (ENG)
AP - EP88109225 19880609 [1988EP-0109225]
PR - JP14548387 19870610 [1987JP-0145483]
JP14548487 19870610 [1987JP-0145484]
EC - F16C-C33/62
H02K-C05/173C
DS - DE FR GB IT
DT - Basic

1 / 2 LEGALI - @LEGSTAT
PN - DE 3851573 [DE3851573]
DT - DE-P
ACTE- 19941027 DE/REF-P
 CORRESPONDS TO
 (EP 294813 19941027 [EP-294813])

 19950323 DE/8373
 TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED AND
 HAS BEEN PUBLISHED

 19950921 DE/8363 [-]
 OPPOSITION AGAINST THE PATENT

 20000120 DE/8331 [-]
 COMPLETE REVOCATION
UP - 2000-03

2 / 2 LEGALI - @LEGSTAT
PN - EP 294813 [EP-294813]
AP - EP 88109225/88 19880609 [1988EP-0109225]
DT - EP-P
ACTE- 19880609 EP/AE-A
 EP-APPLICATION
 EP 88109225/88 19880609 [1988EP-0109225]

 19881214 EP/AK-A2 [+]
 DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH
 REPORT:
 DE FR GB IT

 19881214 EP/A2 [+]
 PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT

 19900110 EP/AK-A3 [+]
 DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:
 DE FR GB IT

 19900110 EP/A3 [+]
 SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)

 19900620 EP/17P [-]
 REQUEST FOR EXAMINATION FILED
 900421

 19911211 EP/17Q [+]
 FIRST EXAMINATION REPORT
 911024

 19940921 EP/AK-B1 [+]
 DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION:
 DE FR GB IT

 19940921 EP/B1 [+]
 PATENT SPECIFICATION

 19941027 EP/REF-P
 CORRESPONDS TO:
 (DE 3851573 19941027 [DE3851573])

 19941110 EP/ET [+]

FR: TRANSLATION FILED

19941206 EP/ITF [+]
IT: TRANSLATION FOR A EP PATENT FILED
STUDIO TORTA SOCIETA' SEMPLICE

19950816 EP/26 [-]
OPPOSITION FILED
950619 AB SKF

19991215 EP/GBPR [-]
GB: PATENT REVOKED UNDER ART. 102 OF THE EP CONVENTION DESIGNATING
THE UK AS CONTRACTING STATE
991024

19991215 EP/27W [-]
REVOKED
19991024

UP - 2000-03

3 / 6 PLUSPAT - @QUESTEL-ORBIT
PN - JP63308218 A 19881215 [JP63308218]
STG - (A) Doc. Laid open to publ. Inspec.
TI - (A) ROLLING BEARING
PA - (A) KOYO SEIKO CO; NIPPON DENSO CO
PAO - (A) KOYO SEIKO CO LTD; NIPPON DENSO CO LTD
IN - (A) KITAMURA MASAYUKI; MIYAZAKI HIROYUKI; HOSHINO TERUO; FUJITA
YOSHIKI; NAKAMURA SHIGENOBU; MITANI KENZOU; SHIGA TSUTOMU
IC - (A) F16C-033/62
AP - JP14548387 19870610 [1987JP-0145483]
PR - JP14548387 19870610 [1987JP-0145483]

4 / 6 PLUSPAT - @QUESTEL-ORBIT - image
PN - JP63308219 A 19881215 [JP63308219]
STG - (A) Doc. Laid open to publ. Inspec.
TI - (A) AC GENERATOR FOR VEHICLE
PA - (A) NIPPON DENSO CO; KOYO SEIKO CO
PAO - (A) NIPPON DENSO CO LTD; KOYO SEIKO CO LTD
IN - (A) NAKAMURA SHIGENOBU; MITANI KENZOU; SHIGA TSUTOMU; KITAMURA
MASAYUKI; FUJITA YOSHIKI
IC - (A) F16C-033/62 H02K-007/08
PN2 - JP7072565 B 19950802 [JP95072565]
STG2 - (B) Publd. Examined patent applic.
IC2 - (B) F16C-033/62
AP - JP14548487 19870610 [1987JP-0145484]
PR - JP14548487 19870610 [1987JP-0145484]

5 / 6 PLUSPAT - @QUESTEL-ORBIT - image
PN - US5422524 A 19950606 [US5422524]
STG - (A) United States patent
TI - (A) Antifriction bearing and alternator incorporating same for use
in vehicles
PA - (A) KOYO SEIKO CO (JP); NIPPON DENSO CO (JP)
PAO - Koyo Seiko Company, Ltd., Osaka [JP]
Nippondenso Company, Ltd., Osaka [JP]
IN - (A) KITAMURA MASAYUKI (JP); MIYAZAKI HIROYUKI (JP); NAKAMURA
SHIGENOBU (JP); HOSHINO TERUO (JP); SHIGA TSUTOMU (JP); FUJITA

YOSHIKI (JP); MITANI KENZO (JP)
IC - (A) F16C-035/00 H02K-005/16
AP - US15268793 19931116 [1993US-0152687]
PR - US15268793 19931116 [1993US-0152687]
 JP14548387 19870610 [1987JP-0145483]
 JP14548487 19870610 [1987JP-0145484]
 US20397288 19880608 [1988US-0203972]
EC - F16C-033/62
 H02K-005/173C
PCL - ORIGINAL (O) : 310090000; CROSS-REFERENCE (X) : 029898140
 310042000
DT - Corresponding document

1 / 1 LEGALI - @LEGSTAT
PN - US 5422524 [US5422524]
AP - US 152687/93 19931116 [1993US-0152687]
DT - US-P
ACTE- 19931116 US/AE-A
 APPLICATION DATA (PATENT)
 US 152687/93 19931116 [1993US-0152687]

19950606 US/A
 PATENT

19980126 US/AS01
 CHANGE OF NAME
 DENSO CORPORATION 1-1, SHOWA-CHO KARIYA-SHI, AICHI-KEN, JAPAN *
 NIPPONDENSO CO., LTD. : 19970807

19980421 US/RF
 REISSUE APPLICATION FILED
 970605

20020806 US/RF
 REISSUE APPLICATION FILED
 20020109

UP - 2002-35

6 / 6 PLUSPAT - @QUESTEL-ORBIT - image
PN - USRE37967 E1 20030121 [USRE37967]
STG - (E1) Reissue Patent
TI - (E1) Antifriction bearing and alternator incorporating same for
 use in vehicles
PA - (E1) KOYO SEIKO CO (JP); DENSO CORP (JP)
PAO - Koyo Seiko Company, Ltd., Osaka [JP]
 Denso Corporation, Kariya [JP]
IN - (E1) KITAMURA MASAYUKI (JP); MIYAZAKI HIROYUKI (JP); NAKAMURA
 SIGENOBU (JP); HOSHINO TERUO (JP); SIGA TUTOMU (JP); FUJITA
 YOSHIKI (JP); MITANI KENZO (JP)
IC - (E1) F16C-035/00 H02K-005/16
AP - US86984497 19970605 [1997US-0869844]
PR - US86984497 19970605 [1997US-0869844]
 JP14548387 19870610 [1987JP-0145483]
 JP14548487 19870610 [1987JP-0145484]
 US15268793 19931116 [1993US-0152687]
 US20397288 19880608 [1988US-0203972]
EC - F16C-033/62
 H02K-005/173C
PCL - ORIGINAL (O) : 310090000; CROSS-REFERENCE (X) : 029898140

6/23/03

US RE 37,967

10/040627

310042000

DT - Corresponding document
UP - 2003-05

1 / 1 LEGALI - ©LEGSTAT
PN - US 37967 [USRE37967]
AP - US 869844/97 19970605 [1997US-0869844]
DT - US-E
ACTE- 19970605 US/AE-A
APPLICATION DATA (PATENT)
US 869844/97 19970605 [1997US-0869844]

20030121 US/E1 [+]
REISSUE (PRE-GRANT)
UP - 2003-06

Search[Search Advisor](#)[Get a Document](#)[Shepard's® - Check a Citation](#)[ECLIPSE™](#)[History](#)**Sources**[Guided Search Forms](#)[Command Searching](#)

Legal > Area of Law - By Topic > Patent Law > Legal News > **Patent, Trademark & Copyright Periodicals, Combined** ⓘ

Enter Search Terms
☒ Terms and Connectors
 ☐ Natural Language

```
re37967 or (re pre/1 37967) or re37,967 or (re pre/1
37,967) or ((reissu! or (re pre/1 issu!)) and (37967 or
37,967))
```

Search

Use connectors to show relation of terms (cat or feline, jane w/3 doe) more...

⊕ Suggest Words and Concepts for Entered Terms

⊕ Restrict Search Using Document Segments

Optional: Restrict by Date

☒ No Date Restrictions From To

Search | [Search Advisor](#) | [Get a Document](#) | [Shepard's® - Check a Citation](#)

[Eclipse™](#) | [History](#) | [Delivery Manager](#) | [Practice Area Pages](#) | [Change Client](#) | [Options](#) | [Feedback](#) | [Signoff](#) | [Help](#)
[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

No Documents Found!

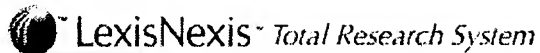
No documents were found for your search (**re37967 or (re pre/1 37967) or re37,967 or (re pre/1 37,967) or ((reissu! or (re pre/1 issu!)) and (37967 or 37,967))**). Please edit your search and try again. You may want to try one or more of the following:

- Check for spelling errors.
- Remove some search terms.
- Use more common search terms.
- If applicable, look for all dates.

A rectangular button with a dark, textured background and the words "Edit Search" in a bold, white, sans-serif font.

[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

[Practice Area Pages](#) | [Change Client](#) | [Options](#) | [Feedback](#) | [Sign Off](#) | [Help](#)**Search**[Search Advisor](#)[Get a Document](#)[Shepard's® - Check a Citation](#)[ECLIPSE™](#)[History](#)**Sources**[Guided Search Forms](#)[Command Searching](#)

[Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Multi-Source Groups](#) > **Patent Cases from Federal Courts and Administrative Materials** ⓘ

Enter Search Terms

☒ Terms and Connectors ☐ Natural Language

re37967 or (re pre/1 37967; or re37,967 or (re pre/1
37,967) or ((reissu! or (re pre/1 issu!)) and (37967 or
37,967))

Search

Use connectors to show relation of terms (cat or feline, jane w/3 doe) more...

⊕ Suggest Words and Concepts for Entered Terms

⊕ Restrict Search Using Document Segments

Optional: Restrict by Date

☒ No Date Restrictions ☐ From To

Search | [Search Advisor](#) | [Get a Document](#) | [Shepard's® - Check a Citation](#)

[Eclipse™](#) | [History](#) | [Delivery Manager](#) | [Practice Area Pages](#) | [Change Client](#) | [Options](#) | [Feedback](#) | [Signoff](#) | [Help](#)
[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

No Documents Found!

No documents were found for your search (**re37967 or (re pre/1 37967) or re37,967 or (re pre/1 37,967) or ((reissu! or (re pre/1 issu!)) and (37967 or 37,967))**). Please edit your search and try again. You may want to try one or more of the following:

- Check for spelling errors.
- Remove some search terms.
- Use more common search terms.
- If applicable, look for all dates.

A rectangular button with a dark background and light-colored text that reads "Edit Search".

[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.



LexisNexis™ Total Research System

[Practice Area Pages](#)[Change Client](#)[Options](#)[Feedback](#)[Sign Off](#)[Help](#)**Search**[Search Advisor](#)[Get a Document](#)[Shepard's® - Check a Citation](#)

ECLIPSE™

[History](#)**Sources**[Guided Search Forms](#)[Command Searching](#)[News & Business](#) > [News](#) > **News Group File, All** ⓘ**Enter Search Terms**☒ Terms and Connectors ☐ Natural Language

re37967 or (re pre/1 37967) or re37,967 or (re pre/1
37,967) or ((reissu! or (re pre/1 issu!)) and (37967 or
37,967))

Search

Use connectors to show relation of terms (cat or feline, jane w/3 doe) more...

☒ Suggest Words and Concepts for Entered Terms☒ Restrict Search Using Document Segments

Optional: Restrict by Date

☒ No Date Restrictions ☐ From To **Search** | [Search Advisor](#) | [Get a Document](#) | [Shepard's® - Check a Citation](#)[Eclipse™](#) | [History](#) | [Delivery Manager](#) | [Practice Area Pages](#) | [Change Client](#) | [Options](#) | [Feedback](#) | [Signoff](#) | [Help](#)
[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

No Documents Found!

No documents were found for your search (**re37967 or (re pre/1 37967) or re37,967 or (re pre/1 37,967) or ((reissu! or (re pre/1 issu!)) and (37967 or 37,967))**). Please edit your search and try again. You may want to try one or more of the following:

- Check for spelling errors.
- Remove some search terms.
- Use more common search terms.
- If applicable, look for all dates.

A rectangular button with a black background and white text that reads "Edit Search".

[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2003 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.